

C1  
polypeptides, polysaccharides and combinations thereof. The first step of the synthesis is either the free radical homopolymerization or the random copolymerization of the oligo-N-isopropyl[meth-]acrylamide side chains by free radical polymerization using an aminoterminated chain transfer agent, for example 2-aminoethanethiol hydrochloride. The next step is the coupling of the amino-terminated macromer to the carboxyl moieties of the biodegradable polymer using the activation reagent, e.g., dicyclohexyl carbodiimide. Other biodegradable polymers such as poly(phosphazenes) poly(caprolactone), polypeptides, polysaccharides and combinations thereof may also be grafted with the oligo-N-isopropyl[meth-]acrylamide side chains using similar synthetic techniques.

#### IN THE CLAIMS

Please amend claim 31 as follows:

- C2
31. (twice amended) A biodegradable thermally reversible graft copolymer, comprising:
- a biodegradable polymer; grafted with
  - a sufficient number of side chains selected from the group consisting of homo-oligomers of [meth-]acrylamide derivatives and co-oligomers of [meth-]acrylamide derivatives copolymerized with hydrophilic comonomers
  - such that said biodegradable thermally reversible graft copolymer forms a reversible gel.

#### SUMMARY OF AMENDMENTS

The Specification has been amended to recite that in order to form a gel, a sufficient number of oligo [meth-]acrylamide derivative side chains must be included in the resulting biodegradable graft copolymers such that the bioactivity of the biological molecules of the backbone is not preserved and therefore the graft copolymers as described do not include polymer/protein bioconjugates.